

California M E D I C I N E

OFFICIAL JOURNAL OF THE CALIFORNIA MEDICAL ASSOCIATION

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Volume 83

JULY 1955

Number 1

What's New and What's True of What's New In Dermatology

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SOME WEEKS AGO I was called on the telephone by a man who said in a tone that was at once demanding and irritating that he wanted to know—"Is there anything new in acne?" For some unaccountable reason, my wits did not completely desert me, as is usual in such situations, and I asked in reply, "New since when?" I must confess to feeling a warm glow at his discomfiture and loss of words. However, when later I began to sort notes for the discussion today, I, too, felt something of that man's discomfiture, for I found it most difficult to establish a base line from which to measure that which is new.

Is it news that dermatologists are becoming more and more aware of a possible association between certain fungous infections and "unrelated" systemic diseases or abnormalities? There have been reports of persons with widespread cutaneous infection due to trichophyton purpureum who were also found to have malignant lymphoblastomatous disease. Case records of several patients with chronic onychomycosis due to trichophyton purpureum reveal that in all instances the glucose tolerance curves were consistently lower than normal. There was recorded recently a case of candidiasis in a child with a disease of the pancreas. Although the number of such cases is small, there is a feeling, nevertheless, that the association might be something more than pure coincidence. Is it news that chloroquine—which is so

useful for the treatment of discoid lupus erythematosus—has also been used successfully for other diseases that are often stubbornly resistant to treatment—a heterogenous group consisting of chronic lichen planus, warts, recalcitrant eruption of palms and soles, sarcoidosis, idiopathic hemorrhagic sarcoma of Kaposi, cheilitis, localized scleroderma and lichen sclerosis et atrophicans in the erythematous stage.¹ In these conditions the treatment is altogether empiric and there is still no established optimum dosage of the drug prescribed for any of these diseases. But, as in discoid lupus erythematosus, the usual procedure is to prescribe 100 mg. of chloroquine three times daily for the first week, twice daily in the second week and once daily thereafter as necessary—with precautionary examinations periodically to guard against damage especially to the hematopoietic system. We, at Northwestern University, have not yet encountered a case in which chloroquine has caused the hair to become bleached—a side effect that has been noted in the literature. Plaquenil, a new type of chloroquine drug which has not been used extensively, is said to be less toxic than chloroquine, but also less effective.

STEROID THERAPY

Steroid therapy continues to make news in dermatology. Systemically administered preparations of newly developed products such as metacortandralone, metacortandracin, aldosterone and halog-

Address of guest speaker, presented before the Section on Dermatology and Syphilology at the 84th Annual Session of the California Medical Association, San Francisco, May 1-4, 1955.

nated cortisone have not been studied sufficiently to evaluate their effect upon cutaneous diseases. The topical use of a halogenated preparation, fluoro-hydrocortisone, is being studied with interest because of its greater potency. Fluorohydrocortisone ointment is about five times more potent than the hydrocortisone acetate or free alcohol ointments. However, unlike the other hydrocortisone ointments, fluorohydrocortisone apparently may produce systemic side effects. The brochure of one drug house warns that sodium retention with edema has been reported in rare instances. One wonders, therefore, whether the favorable results reported from fluoro-hydrocortisone ointment may not be due in part to a systemic effect upon the patient.

One of the most interesting developments has been the tendency of dermatologists to rely more on ointment mixtures containing hydrocortisone than upon hydrocortisone alone. To increase their therapeutic successes, dermatologists are experimenting with and compounding mixtures of hydrocortisone with such time-tested drugs as tars, sulfur, salicylic acid, antibiotics and reducing agents. This practice will undoubtedly become more extensive when hydrocortisone becomes less costly. The tendency is increasing, also, among dermatologists to prescribe less of the proprietary preparations and more of their own prescriptions containing drugs in the proportions and in vehicles of their own choosing, for experience has taught the importance of selecting just the specific ointment base for individual conditions. These developments were inevitable and much worth while, as hydrocortisone is probably the best single antieczematous agent available for topical use. It constitutes a most valuable aid when used with skill and restraint.

CHELATION

Chelating agents have been known for some time, but the art of chelation and its application to dermatology is a new and interesting development, and may prove to have practical value. Chele means "claw," and chelating agents act by grasping, engulfing or encircling various central atoms or ions, particularly metallic ions, so that the latter can no longer be precipitated out by ordinary precipitating agents. These varied agents have different affinities for different metals; one that will engulf lead will not grasp chrome. Chelates have been used in industry to recover trace metals from foods and beverages, and in analyzing solutions. They have been used to decalcify bone, to reduce hypercalcemia, in the treatment of lead poisoning and of urinary calculi; and they have been incorporated in some shampoos because of their ability to engulf the calcium and magnesium ions of hard water, thus constituting

what is, in effect, a water softener. They are also being incorporated into ointments for the prevention of metal dermatitis, such as that occurring on the ear lobes from metallic jewelry. At Northwestern, where we are at present engaged in a study of dermatitis among workers in the lithographic industry, we have been searching for a chelate that would attach onto the chromate ion which is believed to be the offending agent in dermatitis of this type; but so far to no avail, although one such agent is reported to have been used with success in the treatment of chromic ulcers—produced, it is thought, by the trivalent positive chrome ion. Colored water-soluble chelating agents lately have been introduced for employment in histochemistry,³ some, which are selectively bound only where metal is present, and others, which impregnate the tissue as a whole but change color only in the presence of the metal. The study of the metabolism and distribution of metals may thus be enhanced and may conceivably benefit dermatology.

TRANQUILIZING DRUGS

The so-called tranquilizing drugs, chlorpromazine and the rauwolfia group of drugs, have, of course, been applied in dermatology with results that are difficult to assess. Despite the occasional reports of reactions from chlorpromazine, particularly hepatitis, and the suspicion, too, that it may prove to be photosensitizing, the drugs are being used with ever increasing frequency and seem to be replacing the barbiturates. They appear to be more effective in hospital practice than in ambulatory patients, and the drugs benefit the patient generally and his cutaneous lesions indirectly. Nevertheless, one nationally prominent newspaper health columnist recently stated that he had observed refractory psoriasis disappear from a patient who had been given one of the tranquilizing drugs for another disease. Again was hope rekindled among long suffering but ever hopeful psoriatic patients. We regret that our patients with psoriasis to whom the drug was administered were not so fortunate. Some physicians are advising the use of an antihistamine drug along with the tranquilizer in order to reduce the side-reactions of rhinitis. The drugs are being used effectively to cure the mental reactions that sometimes occur from steroid therapy.

BALDNESS

Along the same line, two new treatments for common baldness have recently been introduced. One treatment—which was reported in a letter to the editors of the British Medical Journal and is now being exploited by an American hair-growing insti-

tute—consists of the use of roniacol, a derivative of niacin. It seems that the drug was administered to patients for the treatment of intermittent claudication and two of the patients “proudly and happily” volunteered the information that the tablets had grown a good crop of hair on their bald pates. Hair grew after taking 250 tablets, and an incidental finding was the observation that scalp hairs appeared on heads that were previously barren. It would seem that with the amount of niacin consumed in this country, one would expect bald heads to be the unusual rather than the commonplace. The Glasgow physician who wrote the letter confessed that he had not personally had the time to take the tablets to cure his own advanced baldness.

The other treatment is being exploited by a prominent drug house. The cover of the advertising brochure proclaims Premarin Lotion for the treatment of acne vulgaris, seborrhea and premature alopecia. The text inside the covers states that one observer “studied 75 patients with various skin and nail disturbances which appeared to be related to a deficiency of estrogen.” From this series, the case histories of six patients, three males and three females, were selected to illustrate scalp lesions responding to topical estrogen therapy: “Within three to six weeks alleviation of symptoms and reduced hair loss were noted.” Nowhere in the advertisement does it state that Premarin Lotion grows hair and indeed a detail man from the company was quick to make that plain to me. But it does “control hair fall,” they say. The implication is there. The tune is an old familiar one, the source a surprising one.

LEG ULCERS

Several new suggestions have been made for the treatment of leg ulcers. Saphenous neurectomy has been recommended for selected cases of painful leg ulcers. The relief from pain is said to be immediate and often dramatic. Robinson,⁶ employing more conservative measures, applied powdered antibiotic drugs to leg ulcers, particularly chloramphenicol, bacitracin and bacitracin-polymyxin B sulfate. Aside from the development of a few cases of dermatitis, the results were more than satisfactory—a conclusion that carries considerable significance, because Robinson in many years of experience had employed at one time or another almost every treatment-method suggested: Unnas paste bandages, adhesive dressings, scarlet red ointment, chloresium, vitamin A and D ointment, ultra violet light, dry heat, x-ray therapy, ammoniated mercury, gentian violet, panthenol ointment, aluminum subacetate and boric acid solutions, occlusion, ligation, vein stripping, streptokinase-streptodornase, trypsin and antibiotic ointments. Robinson considered the result from anti-

biotic powder in his 72 ambulatory patients to be far superior to any obtained with the above mentioned treatments. However, Spier and Clifton also obtained excellent results by first applying a combination of antibiotic drug and plasminogen to remove debris and infected material and then applying hyaluronidase.

A new and even more conservative method of treatment employing gelatin sponge powder has in its favor not only a high degree of efficiency, but also the factor of simplicity. Milberg and Tolmach,⁴ treated a group of 106 ambulatory patients, 64 women and 42 men, all of whom had received other standard methods of therapy without success. The majority had varicose or post-thrombophlebitic ulcers, ulcers associated with sickle cell anemia, bed-sore, elephantiasis or ulcers from causes unknown, all of which were treated in the same manner.

The ulcers were packed with sterile absorbable gelatin sponge powder, covered with dry gauze and then wrapped in an elastic bandage or elastoplast dressing. Soothing pastes were applied to any areas of dermatitis that were present and, if infection was present, systemic antibiotic agents were used for several days before treatment. The dressings were changed at weekly intervals. Where the ulcer was huge or where more than one ulcer was present, comparative studies were made against silver leaf foil, an antibiotic ointment, aloe vera leaf and crystalline trypsin. In all cases, the gelatin sponge powder was found to be more effective in stimulating the formation of granulation tissue with resultant early healing of the ulcers.

Still another method especially for hypostatic dermatitis is that recommended by Reisch and Combes,⁵ which consists of a legging made of sponge rubber—legging rather than boot, for it does not encase any of the foot. The leggings cannot be purchased from stock, they must be made to measure for each patient. Reisch and Combes gave specific instructions for the making of such a legging, which has the advantages of uniform pressure from ankle to knee and of giving superficial massage as the patient walks. Also, it permits any sort of adjuvant dressings to be used, as the legging is easily removed and reapplied.

The question as to whether or not an ulcer has undergone cancerous degeneration, always in the forefront, has been made somewhat easier by Ronchese⁷ and co-workers, who employed the Wood's light for detecting carcinomatous tissues in ulcers. The method was described some years ago in both animal and human tissues, but Ronchese's report was enhanced by the inclusion—for the first time—of striking colored photographs which show the vivid “live coal” reddish orange fluorescence of the

squamous carcinoma tissue. To obtain the color, the surface of the lesion must be necrotic. Only the superficial part of the lesion gives the color. Basal cell epitheliomas (even badly ulcerated), carbuncles, benign leg ulcers, gummas and even granuloma fungoides ulcers do not fluoresce with the "live coal" color. Roentgen therapy reduced the fluorescence temporarily. The Wood's light will not be expected to exclude histological examination in order to establish a diagnosis, but it does offer help in selection of the most suitable area for biopsy.

TRYPSIN

Trypsin,² in the form of a suspension of crystalline trypsin in sesame oil (Parenzyme) when injected intramuscularly, was said to bring about good results in a variety of inflammatory diseases, notably thrombophlebitis. It was used also for psoriasis, herpes zoster, atopic eczema, deep pyoderma and abscesses in various locations. About one-third of the patients complained of pain and induration at the site of injection. We, at Cook County Hospital, were about to undertake a study of trypsin in cutaneous diseases, but were advised by a reliable observer that the results would not warrant the treatment, for reactions were not inconsiderable.

Herpes zoster was reported to be favorably influenced by treatment with a new drug—thiastigmine.⁸ The results were uniformly good in 23 cases. The drug combines thiamine chloride and neostigmine methylsulfate, each of which had previously been used alone in herpes zoster with indifferent results. The combination is said to have a synergistic effect which is postulated on the physiologic action of both thiamine and neostigmine as cholinesterase inhibitors, permitting greater liberation of acetylcholine.

NOTES

There is an apparent increase in the incidence of pretibial myxedema since hyperthyroidism is being treated with radioactive iodine. One case observed at Cook County Hospital is responding satisfactorily to treatment with Diamox,[®] a new diuretic being used with success for the treatment of exophthalmus.

The administration of radioactive iodine to reduce thyroid activity permits the utilization of smaller doses of corticosteroids in acute disseminated lupus erythematosus.

There is said to be a world-wide epidemic of planar warts at present, affecting girls in the 10 to 12-year age group and boys to a lesser extent. For some

unaccountable reason, January, February and March were the months of highest incidence.

Dermatologists are learning to recognize that dermatomyositis, like lupus erythematosus, may occur without manifestations in the skin. It is actually multiple myositis and is diagnosed more reliably by an electromyogram than by muscle-biopsy.

Myocostatin, intended for the systemic treatment of moniliasis is reported to effect excellent results in oral thrush. It is used as a mouth rinse.

Whether from parental pressure or from bitter experience, it is difficult to determine, but there seems to be a swing back to early treatment of hemangiomas from the former advice of pediatricians to "wait and see."

In a study of a new complement-fixation test for monilia, Rein and co-workers found that approximately 15 per cent of all persons tested gave positive reactions; approximately 80 per cent of patients with cutaneous moniliasis gave positive reactions; and prolonged administration of tetracycline therapy to patients giving negative reactions failed to change these reactions.

Chemical analysis of brittle nails failed to reveal any decrease in mineral content—results which confirm the long held view of dermatologists that there is no basis for the administration of calcium to patients with brittle nails.

Recent publications of importance and interest include:

Physiology and Biochemistry of the Skin, by Stephen Rothman (University of Chicago Press). The first of its kind in the English language, it is comprehensive, stimulating, interestingly written, new and authoritative—an excellent and important book in every respect.

The Eczemas, by Loewenthal and collaborators (Williams & Wilkins Co.), also excellent, contains a chapter by Hathausen on theoretical considerations of allergic eczema which will delight the hearts of all dermatologists.

The Skin, by Arthur Allen (C. V. Mosby Co.), is written by a pathologist and thus presents the subject with an approach that is fresh and somewhat different than usual. Treatment is not discussed nor is there emphasis on minutiae. Several things in the book are not only controversial but in error. Withal, however, the material is stimulating, current and effectively presented. The excellence of the illustrations alone is sufficient reason to own the book despite its large size and high cost.

Classics in Clinical Dermatology, by Shelley & Crissey (Charles C. Thomas), affords delightful leisure-type reading. It reproduces the original descriptions of the important dermatologic conditions known today. Foreign

originals are translated into English. And it contains also interesting background material of each of the authors. The book may well become a classic in itself.

The Clinical Significance of Disturbances in the Delivery of Sweat, by Sulzberger and Herrman (Charles C. Thomas), consists essentially of material presented by these two authors at the American Academy of Dermatology and Syphilology a few years back. All phases of the subject are reviewed thoroughly and in a way to interest students of the subject.

Handbook of Tropical Dermatology, in two large volumes edited by Simon (Elsevier Publishing Co.), contains in great detail not only diseases peculiar to the tropics, but also discusses the behavior in the tropics of diseases common to the more temperate zones. There is a chapter on historical developments and terminology that is absorbing. The two volumes are well worth owning.

Two small books on topical therapy, one by Lerner's (*Dermatologic Medications*, Year Book Publishers) and the other by Frazier and Blank (*A Formulary for External Therapy of the Skin*, Charles C. Thomas) serve a useful purpose. The Lerner's book is the more practical of the two and contains much material that is new. The Frazier-Blank book discusses the basic phases of the subject in a manner that is thought-provoking and sometimes controversial, but the formulas recommended are often impractical for use except in institutions.

A small book by Canizares on *Modern Diagnosis and Treatment of the Minor Venereal Diseases* (Charles C. Thomas), is plainly written and up to date. It should be helpful both to the students and to the teacher of dermatology.

Diseases of the Skin, eighth edition, by Ormsby & Montgomery (Lea & Febiger), still maintains its position as the most important reference book in dermatology, even though it contains some material that is antiquated.

The fourth edition of *Diseases of the Skin*, by Andrews (Saunders), has been improved considerably by changes

in much of the material in physical methods, particularly radiation. Apparently students prefer this text over others.

Viral and Rickettsial Diseases of Skin, Eye and Mucous Membranes of Man, by Harvey Blank and Geoffrey Rake (Little, Brown & Co.), the first complete and detailed book to be written on the subject. It is an informative reference work, plainly written and represents a skillful combination of clinical experience and scientific information.

MacKenna's second book on *Modern Trends in Dermatology* (Hoeber) maintains the excellent pace of the first edition. It is modern, advanced, well written and adult fare in all respects.

Finally there is the new look of the *Archives of Dermatology*—a new title, new cover and new format. It remains only for new low printing prices to take effect in order to make the use of colored illustrations practical.

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